WEB-BASED COMMUNITY INFORMATION SHARING SYSTEM

(CASE STUDY: KAZINGA, BWEYOGERERE TOWNSHIP)

BY

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DECLARATION

I, Mukola Derrick, declare that this project report is my original work and it is indeed the outcome of my own research. To the best of my knowledge, it has not been presented to any college or university for academic credit. Any information obtained from other sources has been duly acknowledged.

Signature ……. Date ……..

Mukola Derrick

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APPROVAL

This is to certify that this project report titled “Web-Based Community Information Sharing System” is submitted with approval of the university supervisors.

SUPERVISOR

Signature …… Date ……

Mr. Oboth Andrew

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DEDICATION

This work is dedicated to my beloved family which has been loving, supportive, encouraging and patient with me not only when on this undergraduate program but also in many other aspects of my life.

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ACRONYMS

API Application Programming Interface

GSM Global System for Mobile Communications

GUI Graphical User Interface

HTML Hyper Text Markup Language

IDE Integrated Development Environment

JAD Joint Application Development

LC 1 Local Council 1

PHP Hyper text Pre-processor

SDLC Software Development Life Cycle

SMS Short Message Service

SMSC Short Message Service Center

SQL Structured Query Language

WBCISS Web Based Community Information Sharing System

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ABSTRACT

This study was set to explore the different ways in which the residents of Kazinga village, Bweyogerere Township disseminate information among themselves. The main objective of the study was to develop a Web-Based Community Information Sharing System. The researcher used a cross sectional survey design to carry out the research. The respondents for this study were; 2 Political leaders, 1 Police Officer, 1 Director of a Secondary School, 3 Teachers, 2 Health workers, 2 Religious leaders and 7 Business proprietors making a total of 18 respondents. Questionnaire and interview techniques were employed to collect data which was analyzed using the Microsoft Excel Package. The study revealed that the residents of Kazinga faced a number of challenges in the bid to communicate with one another including; infidelity, lack of clear guidelines that govern these platforms, poor administration of these platforms, lack of well stipulated fundraising channels, sectarianism and an inefficient notification criteria which only favors those members who are online at the time when something is posted on the platform. The findings prompted the researcher to develop a Web-Based Community Information Sharing System that notifies the residents by an ordinary SMS (Short Message Service) whenever something has been posted even before they get online, supports online community learning, consumer- vendor interactions, enables members to make financial contributions online on issues that demand fundraising by members in the community and minimizes the spread of fake news, gossip and pornography due to having well stipulated guidelines that govern what kind of information qualifies to be shared and infidelity since the members use their true names and identity. The main method of system development used was the waterfall approach. The programming tools used to develop and implement the system include Notepad++, MySQL, HTML, PHP and XAMPP v3.2.4. Despite the success that the WBCISS registered, it still had some limitations which can be a basis for future work as recommended by the researcher in this project report.

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CHAPTER ONE

1.1 Introduction.

This study provides a platform for information sharing among residents of Kazinga village, Bweyogerere Township.

According to Kroenke (2015), information is processed data which is meaningful to the user.

Oketunji (2002) argued that information is data that have been processed, transmitted by the recipient, interpreted and understood by the recipient. This implies that after the sender has thought about something and compiled it into information; they send it to the receiver who then reads the information, makes sense of it (interprets it) in a bid to understand it. Usually, it is always after the sender has received a feedback from the receiver that the communication chain is successfully complete.

According to S. Rafaeli and D. R. Raban (2005), information sharing is the act of providing a helpful answer to a request for information. Thus, sharing is different from plain posting of information in 'broadcast' mode. Sharing is responsive and it depends on the kindness of peers, friends, or complete strangers, or on some intangible reward structure. Information may be shared in different levels in private and public spaces, at work or non work settings, by people from different disciplines and depending on the content requested. The quality and reliability of the information shared, and its acceptance, its trust, and willingness to ask for it are all variable too.

According to (P.K. Kannan, 2000), an electronic community is a social aggregation of critical masses of people on the internet who engage in public discussions, interactions and information exchanges with sufficient human feeling on matters of common interest to form webs of personal relationships. There are five different types of online community which include; Professional communities that let people doing similar work share advice and experience; Action communities that campaign for social change;

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Communities based on circumstance which gather together people who share a particular situation, such as motherhood or drug addiction; Interest communities that are focused on a particular passion, hobby or brand; and local communities that focus on a small area. The main features in online communities that attract people are a shared communication environment; relationships formed and nurtured a sense of belonging to a group, the internal structure of the group, common space shared by people with similar ideas and interests. The three most critical issues are belonging, identity, and interest.

S. Rafaeli and D. R. Raban (2005) stated that for a web based information sharing community to flourish there needs to be consistent participation, interest, and motivation which this study addresses.

1.1 Background of the study.

Bweyogerere is one of the six townships or wards that constitute Kira Municipality in Wakiso District in southern central Uganda. The other five townships are Kimwaanyi, Kira, Kireka, Kirinya and Kyaliwajjala. In a township, there is usually a mayor and three, four or five committee members, who are elected, and who hold all legislative powers not held by the mayor.

According to https://en.wikipedia.org/wiki/Bweyogerere (26 October 2016), Bweyogerere is located on the Kampala-Jinja Highway, approximately 12 kilometers (7.5 mi), east of Kampala, Uganda's capital and largest city. The coordinates of the township are: 0°21'09.0"N 32°39'49.0"E (Latitude: 0.352500; Longitude: 32.663611). Bweyogerere is on a hill that rises to a peak of 1,200 meters (3,900 ft) above sea level. Mandela National Stadium is located in the southwestern corner of Bweyogerere, on the southern side of the Kampala–Jinja Highway.

Kazinga village located between Bweyogerere and Namanve is one of those areas which used to be so secluded along the Jinja-Kampala highway. It is about two to three kilometers from Bweyogerere Trading Centre near Namanve. Kazinga is one of the

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villages in Bweyogerere. Other villages in Bweyogerere include, Amonikakine, Bombe, Bukasa, Butto A, Butto B, Butto C, Butto D, Butto E, Butto F, Butto G, Butto H, Central Zone A, Central Zone B, Central Zone C, Kakajjo A, Kakajjo B, Kakajjo C, Kakajjo D, Kayoro, Kazinga A, Kazinga B, Kazinga C, Kigandazi A, Kigandazi B, Kireku, Kireku A, Kireku B, Kireku C, Kireku D, Kireku E, Kireku Railway, Kirinya, Kito Zone I, Namataba, Ntebetebe, Ntebetebe A, Ntebetebe B, Ntebetebe C and Wellspring.

Kazinga is an urban setting with industries such as Darling Hair Braids Industry and Bakhresa Milling Factory (AZAM); a number of supermarkets; Health facilities such as Harpet Medical Center, Gwatiro Hospital and Doctor's clinic; several boutiques; salons; estates; youth centre; good infrastructure such as tarmac roads, proper waste management, piped water and stable electricity supply; whole sale and retail shops; churches; mosques; schools and a Police Post.

Currently, the residents of Kazinga have a number of ways in which they disseminate information ranging from social media, phone calls, radio, television, emails and newspapers. However, among all these, social media platforms such as twitter, whatsapp, facebook, instagram, imo, telegram, name them, provide the fastest means of information sharing and it is on this basis that the study of building a Web-Based Information Sharing System came in handy to address some of the challenges experienced during information exchange on social media platforms thereby improve information dissemination among residents of Kazinga with this system.

What cannot be denied is the fact that majority of the social media platforms where the residents subscribe to operate on the principle of sectarianism in that you will find them splitting the residents basing on religious denominations, neighborhood, friendship, professional disciplines, business, educational institutions, financial status, name them, into different groups such as whatsapp groups, facebook groups, telegram, and many others. This compromises uniform information sharing especially on those issues that concern the entire community because the residents belong to different groups.

Whenever the Local Council 1(LC1) Chairperson of Kazinga has information to share

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with the residents, he will have to post it on the few social media platforms where he belongs and then the message will be forwarded from one platform to another and as it circulates, it can be altered or modified to suit personal interests. There is no guarantee that that this message will reach all the targeted residents since some of them do not subscribe to any of the social media platforms regardless of using social media due to a number of reasons some of which the researcher later on discovered among which included a lot of gossip, fake news and pornography that makes round on most of these social media platforms due to lack of clear guidelines: administration and as a result, some of the residents abstain from participating in any of these social media platforms. The other reason as to why it is not a guarantee that information will reach all the residents in Kazinga is because at times, the residents are offline at the moment information is posted and some others even take a while without logging into their social media handles. This can be a week or even more and it deprives them an opportunity to receive information in a timely manner. It should be noted that information posted on the social media platforms can only be accessed if one is online and logged in, short of that, one will not have an idea that something is being discussed or has been shared in the group.

Some residents argue that some participants in these groups use nick names which disguise their identity and gives them the confidence to embark on insulting other people, spread false information and post pornography without any fear of being tracked down very easily. This is due to lack of well stipulated guidelines managing these groups and improper data bases.

This study seeks to address the above mentioned challenges through having a centralized Web Based Community Information Sharing System managed by the LC1 Chairperson which has all details of the residents of Kazinga Village that are properly managed to curb infidelity; overcome all forms sectarianism of all sorts ranging from religion, friendship, professional disciplines, business ties, education level, and financial status since all residents will be on the same platform; proper guidelines that are well stipulated to curb gossip, fake news and pornography and notify the members by Short Message Service(SMS) whenever a post is made on the platform.

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1.2 Problem statement.

Baym, N.K (2000) argued that in any community, people do interact with one another and exchange information from time to time. However, people in different communities face quite a number of challenges in the bid to communicate with one another using the various available web-based information sharing platforms among which includes; infidelity, lack of clear guidelines that govern these platforms, poor administration of these platforms, lack of well stipulated fundraising channels, sectarianism and an inefficient notification criteria which only favors those members who are online at the time when something is posted on the platform and this is what the Web-based Community Information Sharing System addressed.

1.3 Main Objective.

The main objective of the study was to develop a Web-Based Community Information Sharing System.

1.4 Specific Objectives.

The research was guided by the following objectives:

(i) To review the literature on the current system and determine the requirements for designing a Web- Based Community Information Sharing System.

(ii) To design a Web-Based Community Information Sharing System.

(iii) To implement the Web-Based Community Information Sharing System.

(iv) To test and validate the performance of the Web-Based Community Information Sharing System.

1.5 Significance of the study.

There were quite a number of short comings that affected information dissemination in

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Kazinga. Some of these challenges can be overcome by adopting this system so that the members that subscribe to this Web Based Community Information System always get notified by an ordinary SMS (Short Message Service) whenever there is topical discussion and when something has been posted even before they get online.

The system supports online community learning in a sense that members have immediate access to information and this allows them educate themselves. People are best able to learn when they engage, communicate, and collaborate with each other.

The system as well supports consumer- vendor interactions for it gathers people around common interests and these common interests can include brands, products, and services and finally, the system enables members to make financial contributions online on issues that demand fundraising by members in the electronic community.

Infidelity is minimized since the members use their true names and identity that match with what the administrator (LC1 Chairperson) recorded while communicating using the Web-Based Community Information Sharing System.

The system minimizes the spread of fake news, gossip and pornography due to having well stipulated guidelines that govern what kind of information qualifies to be shared.

1.6 Scope of study.

The Web-Based Community Information Sharing System encodes and manipulates the range of knowledge and values necessary to function effectively in a community with instant notification to the members by ordinary SMS whenever there is topical discussion and when something has been posted even before they get online; supports consumer-vendor interactions; enables members make financial contributions online on issues that demand fundraising in the community and the system facilitates online community learning where the members have immediate access to information allowing them educate themselves through engaging, communicating and collaborating with each other.

This study was conducted in Kazinga village, Bweyogerere Township and it took nine

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months.

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